

SIZING THE OSWTF

Clarification of Rule: The rule does not specify how to determine minimum septic tank size for a single residence if two columns in the table (e.g., 3 bedrooms but 19 fixtures) give conflicting answers. Likewise, determination of daily design flow using Table 1 in the rule is not clear. The following table resolves these uncertainties. As this table indicates, the bedroom count is the primary determinant of minimum septic tank size and daily design flow. For a specific bedroom count, the minimum septic tank size and the daily design flow (which governs disposal field sizing), depend on whether a threshold fixture count is exceeded or not exceeded. The daily design flow listed in the table also is specified by the reviewing agency in the Verification of General Permit Conformance per R18-9-A309(C)(3)(a) and serves as an operational constraint of the permit.

| SELECTING THE PROPER SIZE SYSTEM | | | |
|---|----------------------|--|---|
| <i>No. of Bedrooms*</i> | <i>Fixture Count</i> | <i>Minimum Septic Tank Size (gallons)</i> | <i>System Daily Design Flow (gallons per day)</i> |
| 2 - 3 | 21 or less | 1000 | 450 |
| | more than 21 | 1250 | 600 |
| 4 | 28 or less | 1250 | 600 |
| | more than 28 | 1500 | 750 |
| 5 | 35 or less | 1500 | 750 |
| | more than 35 | 2000 | 900 |
| 6 | 41 or less | 2000 | 900 |
| | more than 41 | 2000 | 1050 |
| 7 | 45 or less | 2000 | 1050 |
| | more than 45 | 2500 | 1200 |

**For a single residence with more than 7 bedrooms, use R18-9-A314(D)(2) as the basis for determining minimum septic tank size and system design flow. Basically, use whichever is greater, bedroom/equivalent count or fixture units and the following formulas to determine the Size of the Septic Tank and the System Daily Design Flow. For septic tank size; multiply the number of bedrooms by 150, then multiply that total by 2.1. This will equal the minimum septic tank size in gallons. OR multiply the total fixture units by 25, then multiply that total by 2.1. For System Daily Design Flow; multiply the number of bedrooms by 150, this will equal the minimum Design Flow in gallons per day. OR multiply the total fixture units by 25.*

Fixture counts for single residence use in the above table should be determined as follows:

| FIXTURE UNIT COUNT | | | |
|--|---------------|---|---------------|
| Residential Fixture Type | Fixture Units | Residential Fixture Type | Fixture Units |
| Bathtub | 2 | Sink, bar | 1 |
| Bidet | 2 | Sink, service | 3 |
| Clothes washer (with or without laundry tub) | | Lavatory, single | 1 |
| Dishwasher, service | 2 | Lavatory, double, on same plumbing wall | 1 |
| Utility tub or sink separate from clothes washer | 2 | Water closet, 1.6 gallons per flush or less | 3 |
| Shower, single stall | 2 | Water closet, 1.7 to 3.2 gpf | 4 |
| Sink, kitchen (with or without dishwasher) | 2 | Water closet, greater than 3.2 gpf | 6 |